

UNITED STATES GENERAL ACCOUNTING OFFICE REGIONAL OFFICE SUITE 300-D, 2420 W. 26TH AVENUE

DENVER, COLORADO 80211

ATR 4 1975

Mr. Joseph L. Mulvey
Regional Administrator
Law Enforcement Assistance Administration 4270
U.S. Department of Justice
6324 Federal Building
Denver, Colorado 80202

Dear Mr. Mulvey:

We recently completed a survey of the impact of learning disabilities on juvenile delinquency in Colorado, and this letter contains a summary of our observations, conclusions, and suggestions. The General Accounting Office is presently doing similar work in other states and plans to issue a report on its overall findings next year.

Our survey was performed at the Law Enforcement Assistance Administration (LEAA) Denver Regional Office; the Colorado State Planning Agency; the Denver Anti-Crime Council; the Denver Juvenile Court, Juvenile Hall, and District Attorney's Office; the Adams County District Court and Juvenile Detention Center; the Colorado Division of Youth Services; and the Colorado Department of Education. We interviewed psychologists, administrators, educators, and juvenile justice officials. We also obtained the results of several studies, conducted in various parts of the country, that attempted to establish a relationship between learning disabilities and juvenile delinquency.

LEARNING DISABILITIES AND JUVENILE DELINQUENCY

Officials we questioned agree that learning disabled children are not mentally retarded. While these children generally show the same I.Q. range as their peers, their level of performance is below that of their peers. Officials also agree that conditions such as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia are specific learning disabilities. A generally accepted definition of learning disabilities however is lacking because there is disagreement as to whether learning problems created by emotional or environmental factors are learning disabilities. Moreover, there is disagreement among experts regarding how to test for learning disabilities. The definitions used for learning disabilities by the Colorado Department of Education and the Division of Youth Services differ from each other and are broader than the definition used by the Department of Health, Education, and Welfare's Bureau of Education for the Handicapped.

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The Colorado Department of Education classifies a child as learning disabled when he exhibits significant identifiable emotional or behavior disorders or identifiable perceptual or communicative disorders. However, the Colorado Division of Youth Services classifies a delinquent as learning disabled when he shows any disorder that inhibits him from learning in accordance with his full ability and potential.

The Bureau defines specific learning disabilities as disorders in one or more of the basic psychological processes involved in understanding or in using written or spoken language. Such disorders may be manifested in imperfect abilities to listen, think, speak, read, write, spell, or do mathematical calculations. Conditions such as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia are all considered to be specific learning disabilities. Learning problems which are the result of visual, hearing, or motor handicaps; of mental retardation; of emotional disturbance; or of environmental disadvantage are not specific learning disabilities according to the Bureau definition.

Because the I.Q. range of learning disabled children is similar to that of their classmates, it is generally agreed that their learning disabilities can be compensated for or remedied. We were told, however, that if compensation or remediation is not provided, the learning disabled child will often experience failure in school and will frequently become negatively labeled by teachers, parents, and peers. School becomes a frustrating experience and the mounting frustration can lead to behavior problems or truancy. If the frustration reaches a high enough level, the youth may turn to anti-social behavior to find the success he could not find in school. If he does find success in anti-social behavior, the youth may well be on the road to a pattern of delinquent activity.

The following studies by various Colorado agencies indicate the extent to which the agencies believe learning disabilities, or at a minimum some learning problems, may exist in the State's juvenile delinquent population. We have not thoroughly validated the studies' results or determined if their definitions of learning disabilities and testing methods were consistent with the ones we are using in our Virginia study. Thus, we cannot comment on the validity of the exact percentage of youth identified as having learning disabilities in the studies. Nevertheless, we believe the studies' results do indicate the existence of learning problems in delinquents which should be addressed to provide these youth with better means to overcome their problems and lead productive, socially acceptable lives.

In Colorado, a Division of Youth Services study shows that approximately 90 percent of the 444 youth committed to the State between July 1, 1972, and May 1, 1973, had learning disabilities. Results of another Division

of Youth Services study completed in March 1972 show that 100 percent of the 100 youth at Lathrop Park Youth Camp were learning disabled. Of these 100 youth, 67 had problems so severe that they could not be expected to function meaningfully in the regular classroom, yet 55 had never before been identified as having learning disabilities.

Results of a study conducted by Project Intercept, an LEAA funded delinquency control project in Denver, show that 80 percent of the youth evaluated are falling 2 or more years below grade level in terms of performance. Of the youth evaluated, 79 percent showed perceptual or perceptual motor problems which would appear to be the basic cause of their academic difficulties.

Project New Pride is also an LEAA funded delinquency control project in Denver. Project statistics indicate that 80 percent of the New Pride participants were perceptually handicapped, and many were so severely handicapped that tutoring or effective vocational training is impossible without therapy.

Most juvenile justice officials we interviewed believed that there could be a relationship between learning disabilities and juvenile delinquency. We were told that failure to identify and remedy learning disabilities will often result in delinquency and that failure to consider a delinquent's learning disabilities will often result in unsuccessful rehabilitation. A function of the juvenile justice system, according to officials we interviewed, should be the diagnosis of learning disabilities prior to the start of rehabilitation efforts.

EXTENT TO WHICH COLORADO AGENCIES DIAGNOSE THE LEARNING DISABLED CHILD

Colorado Department of Education

Although learning disabilities in children can be detected in the pre-school years, Colorado law does not provide for mandatory learning disability screening either prior to or after a child enters school. We were told that most school districts will not test a child for learning disabilities until he has become a problem in the classroom. By this time (third or fourth grade), however, the learning disabled child often has developed emotional problems which are a very normal reaction to the difficulties he is experiencing in school.

The Colorado Department of Education estimates that there are approximately 50,000 public school children in Colorado who have significant identifiable emotional or behavior disorders or identifiable perceptual

or communicative disorders. During the 1973-74 school year 18,799 of these children received school sponsored diagnostic or remediation services. This gap between need and services provided should narrow after July 1, 1975, when school districts throughout the State will be required by the Colorado Handicapped Children's Educational Act to provide for the education of all identified handicapped children. This act however does not require school districts to screen all school age children for learning disabilities.

Denver Juvenile Hall and the Adams County Juvenile Detention Center

At Denver Juvenile Hall, we were told that all youth with academic problems who are detained for more than 5 days receive a learning disability diagnostic battery that includes visual screening, auditory discrimination, visual perception, motor coordination, and learning aptitude evaluations. Results from September 1974 to March 1975 show that approximately 80 percent of the youth evaluated have learning disabilities.

At Adams County Juvenile Detention Center, we were told that all youth detained for more than 2 days receive a test to determine general achievement in the areas of reading, spelling, mathematics, and language. Based on results of this test, other tests might be administered to determine word recognition skills, auditory discrimination abilities, and arithmetic strengths and weaknesses. Results from October 1974 to March 1975 show that approximately 80 percent of the youth tested have learning disabilities.

Both of these juvenile facilities send test results to the youth's school where such results could serve as the basis for enrolling the youth in a school-sponsored learning disability remediation program.

Colorado Division of Youth Services

After a youth has been committed to the State, he is thoroughly tested for learning disabilities by Division of Youth Services diagnosticians. Diagnostic testing generally starts with visual and audiometric screening examinations that measure sensory input. If results of a recent general achievement test are not available, such a test is administered and the results, including a handwriting legibility analysis, serve as the basis for further testing. Specifically, if the youth does poorly on either the reading, spelling, or mathematics achievement subtest; or if the youth's handwritten test responses are found to be clumsy, semi-legible, or poorly coordinated, further testing would be employed. Such testing might determine the youth's reading comprehension level, non-verbal intelligence, visual perception ability, auditory discrimination ability, visual memory, or visual motor integration ability. In addition to the testing procedures

mentioned above, all students are given a speech screening to determine articulation problems. If such problems are found, an auditory discrimination test is administered. In addition, the speech screening picks up mumbly speech, stammering, stuttering, nasality, and voice problems. Between July 1, 1972, and May 1, 1973, test results show that approximately 90 percent of the youth committed to the State have learning disabilities.

Based on test results, personal observation by the learning disability diagnostician, and recommendations of the Department of Youth Services' psychologist, an individualized rehabilitation program is developed for each youth. Realistic rehabilitation goals are determined and progress toward those goals is periodically measured. In this way, the rehabilitation program, which often centers around learning disability remediation and compensation, is forced to conform to the needs of the youth rather than the youth being forced to conform to the rehabilitation program.

FEDERAL FUNDING OF LEARNING DISABILITY PROGRAMS IN COLORADO

Department of Health, Education and Welfare funds

We identified four sources of Health, Education and Welfare learning disability funds that are administered by the Colorado Department of Education.

Title III of the Elementary and Secondary Education Act provides funds for innovations in education. At least 15 percent of Title III funds must be spent on programs for the handicapped, which includes the learning disabled. During fiscal year 1974, \$161,500 in Title III funds reached 1,307 learning disabled children in Colorado. Most of the fiscal year 1974 Title III programs reviewed provided for the diagnosis and treatment of learning disabled children.

Part B of the Education of the Handicapped Act provides funds to initiate, expand, and improve educational and related services to handicapped pre-school, elementary, and secondary school children. During fiscal year 1974, \$181,750 in Part B funds reached 2,017 learning disabled children in Colorado. Like the Title III programs we reviewed, most fiscal year 1974 Part B programs provided for the diagnosis and treatment of learning disabled children.

Part D of the Education of the Handicapped Act provides funds to prepare teachers and other specialists to educate handicapped children. During fiscal year 1974, \$12,600 in Part D funds were used to prepare

40 teachers to educate an estimated 600 learning disabled children in Colorado. We were told that most teachers prepared with the Part D funds were elementary school special education teachers.

Part G of the Education of the Handicapped Act provides funds for research and training of personnel and the operation of model centers for children with learning disabilities. During fiscal year 1974, \$86,000 in Part G funds supported eight model centers that provided diagnostic and remediation services to 777 elementary school children in Colorado.

The following chart summarizes the funding and the number of children served for each of the fiscal year 1974 Health, Education and Welfare learning disability programs that were examined:

	Amount	No. of children served
Title III	\$161,500	1,307
Part B	181,750	2,017
Part D	12,600	600
Part G	86,000	777
Total	<u>\$441,850</u>	^a 4,701

The 4,701 children served can be further categorized as follows:

÷	No. of children served	Percent
Pre-school Elementary school Junior and senior high school	843	18
	3,565	7 6
	293	6
Total	a _{4,701}	100

This figure represents the maximum number of children served. We were told that some children may have been served by more than one program, but we were unable to determine the amount of overlap.

Law Enforcement Assistance Administration

We identified three Law Enforcement Assistance Administration funded learning disability grants currently operational in Colorado. The Colorado Division of Youth Services, Project Intercept, and Project New Pride are the grantees. The Colorado Division of Youth Services, responsible for youth committed to the State by the Courts, received \$115,000. Between July 1, 1974, and June 30, 1975, the Division planned to use the grant proceeds to:

- 1. Plan, prepare, implement and evaluate a comprehensive sophisticated program for diagnosing and treating learning handicaps.
- 2. Train staff members to follow up on the diagnosis with treatment methodologies and further diagnosis that can correct or teach the child to adapt to the most severe problems.
- 3. Evaluate the success of the diagnosis and treatment and to make details of that diagnosis and treatment available to communities and community agencies.
- 4. Develop the expertise necessary on the part of Division of Youth Services staff members so that they can be used as resource persons by community agencies interested in developing similar programs.

First year goals as stated in the learning disability grant include:

- 1. Determining effective treatment processes for at least 50 percent of the students with identifiable learning disabilities.
- 2. Training 100 employees of the Division of Youth Services in either learning disability diagnosis, treatment, or treatment development.

Project Intercept is a community based juvenile delinquency prevention and rehabilitation project serving youth under 16 years of age who are referred by the schools and by the juvenile justice system. Between October 1972 and December 1974, the Project received \$643,000 and an additional \$513,455 has been awarded to carry the Project through June 1976.

Project officials recognize that delinquency has its roots in both family disorganization and academic failure, therefore Project Intercept works with both the youth and his family. The entire family is taught new methods of interaction leading to more positive control over behavior. Since the majority of youth in the Project are performing 2 or more years below grade level, each youth is thoroughly tested for learning disabilities. Based on test results, which show that 79 percent of 138 youth tested have perceptual or perceptual motor problems, an individualized program of instruction is developed and administered by Project Intercept education personnel.

Thirty-seven youth were terminated from the Project Intercept school program as of June 30, 1974. The average increase in reading level for these students was 1.3 grades and was accomplished with an average of 30.8 hours of instruction for each grade level increase. The average increase in mathematics performance was 1.4 grades and was accomplished with an average of 32.2 hours for each grade level increase. The average attendance of these youth at the Project Intercept school was 75.4 percent in contrast to a 40.8 percent attendance rate at public school during the 3 months prior to being referred to the Project.

Between March 1973 and June 1974, 138 youth entered the Project Intercept treatment program. During this time period, an additional 21 youth referred to the Project were randomly assigned to a non-treatment control group. Of the 138 youth in the treatment group, 59 (42.8 percent) were rearrested prior to June 30, 1974. Of the 21 youth in the control group, 18 (85.7 percent) were rearrested prior to June 30, 1974. The best measure of recidivism is convictions, not arrests. But the program's findings do provide an indication of the possible positive results that treatment of learning disabilities might bring. Preliminary results achieved at Project Intercept indicate that learning disabled delinquents are able to succeed academically and that academic success can be substituted for anti-social success.

Project New Pride is a community based juvenile delinquency rehabilitation program designed to serve probationers with a record of two or more convictions for serious offenses (burglary, robbery, and assault). Participants range in age from 14 to 18 with the average age being 16. All referrals are received directly from Denver Juvenile Court probation officers and are provided tutorial education, cultural education, vocational training, and part-time job placements. Law Enforcement Assistance Administration has invested \$492,945 in Project New Pride, which began in June 1973 and has been funded through June 1976.

Project officials recognize that education and training may be difficult for learning disabled youth; therefore all participants are tested for learning disabilities when they enter the project. Test results show that about 80 percent of the participants have perceptual handicaps. Many of these youth are so severely handicapped that tutoring or effective vocational training is impossible without prior therapy. Test results also show that 75 percent of the new enrollees read below the sixth grade level, 80 percent spelled below the fourth grade level, and 100 percent could not perform mathematical calculations above the third grade level. Learning disability remediation is a very important part of the project tutoring program and is provided both prior to and concurrent with vocational training and job placement.

Of the 60 participants who have completed the training phases of the program, 50 percent showed an increase of two grade levels in reading and one grade level in spelling and mathematics, 15 percent showed one grade level improvement in all three subjects, 5 percent showed no improvement, and 30 percent have not been retested. Results achieved at Project New Pride indicate that even the "hardened" learning disabled delinquent has the ability to learn and can achieve academic success.

A follow up study indicated that 19 of 36 New Pride participants (53 percent) were rearrested. Many of these rearrests involved curfew violations, and only one Project participant had been rearrested for burglary.

CONCLUSIONS AND SUGGESTIONS

Untreated learning disabilities could contribute to juvenile delinquency. In addition to funds provided Colorado's education agencies by the Department of Health, Education and Welfare, three Law Enforcement Assistance Administration funded projects were directed toward programs whose treatment objectives considered a youth's learning disabilities.

Given the resources available to meet educational and criminal justice needs, it is probably unreasonable to expect that all problems in the two fields will receive adequate attention. Some action, however, could be taken to focus more attention on the extent to which learning disabilities need to be treated to prevent or reduce juvenile delinquency.

We suggest that the Law Enforcement Assistance Administration Region VIII Administrator encourage the Colorado criminal justice State planning agency to work closely with the State Department of Education in developing a strategy to address the learning disability problem as it relates to juvenile delinquency. After a strategy is developed, available Federal resources could be allocated in a coordinated effort. The Regional Administrator may also want to encourage other criminal justice State planning agencies in his region to undertake similar actions.

We are sending copies of this report to various other Federal, State, and local officials including Congresswoman Schroeder and other interested parties who expressed an interest in our work. Additionally, we are providing the Law Enforcement Assistance Administration Administrator with a copy.

We appreciate the cooperation and courtesy extended to us by Region VIII Law Enforcement Assistance Administration, Colorado State Planning Agency, and Denver Anti-Crime Council officials during our survey. We will be pleased to discuss the material presented in this letter with you or with members of your staff.

Sincerely yours,

Irwin M. D'Addario

Regional Manager